



Sunesis-0021.ST25.txt  
SEQUENCE LISTING

<110> Ballinger, Marcus  
<120> Constructs for Homogenously Processed Preparations of Beta Site  
App-Cleaving Enzyme  
<130> 2004345-0021  
<140> 10/726,967  
<141> 2003-12-02  
<160> 110  
<170> PatentIn version 3.2  
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Leu Pro Ala His Gly Thr Gln His Gly Ile Arg Leu Pro Leu Arg Ser  
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Gly Leu Gly Gly Ala Pro Leu Gly Leu Arg Leu Pro Arg Glu Thr Asp  
35 40 45

Glu Glu Pro Glu Glu Pro Gly Arg Arg Gly Ser Phe Val Glu Met Val  
50 55 60

Asp Asn Leu Arg Gly Lys Ser Gly Gln Gly Tyr Tyr Val Glu Met Thr  
65 70 75 80

Val Gly Ser Pro Pro Gln Thr Leu Asn Ile Leu Val Asp Thr Gly Ser  
85 90 95

Ser Asn Phe Ala Val Gly Ala Ala Pro His Pro Phe Leu His Arg Tyr  
100 105 110

Tyr Gln Arg Gln Leu Ser Ser Thr Tyr Arg Asp Leu Arg Lys Gly Val  
115 120 125

Tyr Val Pro Tyr Thr Gln Gly Lys Trp Glu Gly Glu Leu Gly Thr Asp  
130 135 140

Leu Val Ser Ile Pro His Gly Pro Asn Val Thr Val Arg Ala Asn Ile  
Page 1

145                      150                      155                      160  
 Ala Ala Ile Thr Glu Ser Asp Lys Phe Phe Ile Asn Gly Ser Asn Trp  
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 Glu Gly Ile Leu Gly Leu Ala Tyr Ala Glu Ile Ala Arg Pro Asp Asp  
                                  180                                   185                                   190  
 Ser Leu Glu Pro Phe Phe Asp Ser Leu Val Lys Gln Thr His Val Pro  
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 Asn Leu Phe Ser Leu Gln Leu Cys Gly Ala Gly Phe Pro Leu Asn Gln  
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 Ser Glu Val Leu Ala Ser Val Gly Gly Ser Met Ile Ile Gly Gly Ile  
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 Asp His Ser Leu Tyr Thr Gly Ser Leu Trp Tyr Thr Pro Ile Arg Arg  
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 Glu Trp Tyr Tyr Glu Val Ile Ile Val Arg Val Glu Ile Asn Gly Gln  
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 Asp Leu Lys Met Asp Cys Lys Glu Tyr Asn Tyr Asp Lys Ser Ile Val  
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 Asp Ser Gly Thr Thr Asn Leu Arg Leu Pro Lys Lys Val Phe Glu Ala  
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 Ala Val Lys Ser Ile Lys Ala Ala Ser Ser Thr Glu Lys Phe Pro Asp  
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 Gly Phe Trp Leu Gly Glu Gln Leu Val Cys Trp Gln Ala Gly Thr Thr  
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 Pro Trp Asn Ile Phe Pro Val Ile Ser Leu Tyr Leu Met Gly Glu Val  
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 Thr Asn Gln Ser Phe Arg Ile Thr Ile Leu Pro Gln Gln Tyr Leu Arg  
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 Pro Val Glu Asp Val Ala Thr Ser Gln Asp Asp Cys Tyr Lys Phe Ala  
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 Ile Ser Gln Ser Ser Thr Gly Thr Val Met Gly Ala Val Ile Met Glu  
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Gly Phe Tyr Val Val Phe Asp Arg Ala Arg Lys Arg Ile Gly Phe Ala  
405 410 415

Val Ser Ala Cys His Val His Asp Glu Phe Arg Thr Ala Ala Val Glu  
420 425 430

Gly Pro Phe Val Thr Leu Asp Met Glu Asp Cys Gly Tyr Asn Ile Pro  
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Gln Thr Asp Glu Ser Thr Leu Met Thr Ile Ala Tyr Val Met Ala Ala  
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Ile Cys Ala Leu Phe Met Leu Pro Leu Cys Leu Met Val Cys Gln Trp  
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Gln Gly Lys Trp Glu Gly Glu Leu Gly Thr Asp Leu  
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 ccggaattct caggttgact catctgtctg tggaat

36

<210> 76  
 <211> 439  
 <212> PRT  
 <213> Artificial

<220>  
 <223> Soluble human pro BACE1 with engineered thrombin cleavage site  
 starting at position 25

<400> 76

Thr Gln His Gly Ile Arg Leu Pro Leu Arg Ser Gly Leu Gly Gly Ala  
 1 5 10 15

Pro Leu Gly Leu Arg Leu Pro Arg Leu Val Pro Arg Gly Ser Glu Thr  
 20 25 30

Asp Glu Glu Pro Glu Glu Pro Gly Arg Arg Gly Ser Phe Val Glu Met  
 35 40 45

Val Asp Asn Leu Arg Gly Lys Ser Gly Gln Gly Tyr Tyr Val Glu Met  
 50 55 60

Thr Val Gly Ser Pro Pro Gln Thr Leu Asn Ile Leu Val Asp Thr Gly  
 65 70 75 80

Ser Ser Asn Phe Ala Val Gly Ala Ala Pro His Pro Phe Leu His Arg  
 85 90 95

Tyr Tyr Gln Arg Gln Leu Ser Ser Thr Tyr Arg Asp Leu Arg Lys Gly  
 100 105 110

Val Tyr Val Pro Tyr Thr Gln Gly Lys Trp Glu Gly Glu Leu Gly Thr  
 115 120 125

Asp Leu Val Ser Ile Pro His Gly Pro Asn Val Thr Val Arg Ala Asn  
 130 135 140

Ile Ala Ala Ile Thr Glu Ser Asp Lys Phe Phe Ile Asn Gly Ser Asn  
 145 150 155 160

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Trp Glu Gly Ile Leu Gly Leu Ala Tyr Ala Glu Ile Ala Arg Pro Asp  
 165 170 175  
 Asp Ser Leu Glu Pro Phe Phe Asp Ser Leu Val Lys Gln Thr His Val  
 180 185 190  
 Pro Asn Leu Phe Ser Leu Gln Leu Cys Gly Ala Gly Phe Pro Leu Asn  
 195 200 205  
 Gln Ser Glu Val Leu Ala Ser Val Gly Gly Ser Met Ile Ile Gly Gly  
 210 215 220  
 Ile Asp His Ser Leu Tyr Thr Gly Ser Leu Trp Tyr Thr Pro Ile Arg  
 225 230 235 240  
 Arg Glu Trp Tyr Tyr Glu Val Ile Ile Val Arg Val Glu Ile Asn Gly  
 245 250 255  
 Gln Asp Leu Lys Met Asp Cys Lys Glu Tyr Asn Tyr Asp Lys Ser Ile  
 260 265 270  
 Val Asp Ser Gly Thr Thr Asn Leu Arg Leu Pro Lys Lys Val Phe Glu  
 275 280 285  
 Ala Ala Val Lys Ser Ile Lys Ala Ala Ser Ser Thr Glu Lys Phe Pro  
 290 295 300  
 Asp Gly Phe Trp Leu Gly Glu Gln Leu Val Cys Trp Gln Ala Gly Thr  
 305 310 315 320  
 Thr Pro Trp Asn Ile Phe Pro Val Ile Ser Leu Tyr Leu Met Gly Glu  
 325 330 335  
 Val Thr Asn Gln Ser Phe Arg Ile Thr Ile Leu Pro Gln Gln Tyr Leu  
 340 345 350  
 Arg Pro Val Glu Asp Val Ala Thr Ser Gln Asp Asp Cys Tyr Lys Phe  
 355 360 365  
 Ala Ile Ser Gln Ser Ser Thr Gly Thr Val Met Gly Ala Val Ile Met  
 370 375 380  
 Glu Gly Phe Tyr Val Val Phe Asp Arg Ala Arg Lys Arg Ile Gly Phe  
 385 390 395 400  
 Ala Val Ser Ala Cys His Val His Asp Glu Phe Arg Thr Ala Ala Val  
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405

410

415

Glu Gly Pro Phe Val Thr Leu Asp Met Glu Asp Cys Gly Tyr Asn Ile  
 420 425 430

Pro Gln Thr Asp Glu Ser Thr  
 435

<210> 77  
 <211> 48  
 <212> DNA  
 <213> Artificial

<220>  
 <223> oligonucleotide for insertion of thrombin cleavage site into  
 soluble human proBACE1

<400> 77  
 ctcttcgtcg gtctcagaac cacgcggaac cagacgtggc agacgcag

48

<210> 78  
 <211> 433  
 <212> PRT  
 <213> Artificial

<220>  
 <223> Soluble human proBACE1 containing an engineered RLPL site  
 starting at position 21

<400> 78

Thr Gln His Gly Ile Arg Leu Pro Leu Arg Ser Gly Leu Gly Gly Ala  
 1 5 10 15

Pro Leu Gly Leu Arg Leu Pro Leu Glu Thr Asp Glu Glu Pro Glu Glu  
 20 25 30

Pro Gly Arg Arg Gly Ser Phe Val Glu Met Val Asp Asn Leu Arg Gly  
 35 40 45

Lys Ser Gly Gln Gly Tyr Tyr Val Glu Met Thr Val Gly Ser Pro Pro  
 50 55 60

Gln Thr Leu Asn Ile Leu Val Asp Thr Gly Ser Ser Asn Phe Ala Val  
 65 70 75 80

Gly Ala Ala Pro His Pro Phe Leu His Arg Tyr Tyr Gln Arg Gln Leu  
 85 90 95

Ser Ser Thr Tyr Arg Asp Leu Arg Lys Gly Val Tyr Val Pro Tyr Thr  
 100 105 110

Gln Gly Lys Trp Glu Gly Glu Leu Gly Thr Asp Leu Val Ser Ile Pro  
 115 120 125

His Gly Pro Asn Val Thr Val Arg Ala Asn Ile Ala Ala Ile Thr Glu  
 130 135 140

Ser Asp Lys Phe Phe Ile Asn Gly Ser Asn Trp Glu Gly Ile Leu Gly  
 145 150 155 160

Leu Ala Tyr Ala Glu Ile Ala Arg Pro Asp Asp Ser Leu Glu Pro Phe  
 165 170 175

Phe Asp Ser Leu Val Lys Gln Thr His Val Pro Asn Leu Phe Ser Leu  
 180 185 190

Gln Leu Cys Gly Ala Gly Phe Pro Leu Asn Gln Ser Glu Val Leu Ala  
 195 200 205

Ser Val Gly Gly Ser Met Ile Ile Gly Gly Ile Asp His Ser Leu Tyr  
 210 215 220

Thr Gly Ser Leu Trp Tyr Thr Pro Ile Arg Arg Glu Trp Tyr Tyr Glu  
 225 230 235 240

Val Ile Ile Val Arg Val Glu Ile Asn Gly Gln Asp Leu Lys Met Asp  
 245 250 255

Cys Lys Glu Tyr Asn Tyr Asp Lys Ser Ile Val Asp Ser Gly Thr Thr  
 260 265 270

Asn Leu Arg Leu Pro Lys Lys Val Phe Glu Ala Ala Val Lys Ser Ile  
 275 280 285

Lys Ala Ala Ser Ser Thr Glu Lys Phe Pro Asp Gly Phe Trp Leu Gly  
 290 295 300

Glu Gln Leu Val Cys Trp Gln Ala Gly Thr Thr Pro Trp Asn Ile Phe  
 305 310 315 320

Pro Val Ile Ser Leu Tyr Leu Met Gly Glu Val Thr Asn Gln Ser Phe  
 325 330 335

Arg Ile Thr Ile Leu Pro Gln Gln Tyr Leu Arg Pro Val Glu Asp Val  
 340 345 350

Ala Thr Ser Gln Asp Asp Cys Tyr Lys Phe Ala Ile Ser Gln Ser Ser  
 355 360 365

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Thr Gly Thr Val Met Gly Ala Val Ile Met Glu Gly Phe Tyr Val Val  
370 375 380

Phe Asp Arg Ala Arg Lys Arg Ile Gly Phe Ala Val Ser Ala Cys His  
385 390 395 400

Val His Asp Glu Phe Arg Thr Ala Ala Val Glu Gly Pro Phe Val Thr  
405 410 415

Leu Asp Met Glu Asp Cys Gly Tyr Asn Ile Pro Gln Thr Asp Glu Ser  
420 425 430

Thr

<210> 79  
<211> 7  
<212> PRT  
<213> Artificial

<220>  
<223> RLPL site

<400> 79

Arg Leu Pro Leu Glu Thr Asp  
1 5

<210> 80  
<211> 42  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide to introduce RLPL site into soluble human  
proBACE1

<400> 80  
ctcttcgtcg gtctccagtg gcagacgcag acccagtgga gc

42

<210> 81  
<211> 433  
<212> PRT  
<213> Artificial

<220>  
<223> soluble human proBACE1

<400> 81

Thr Gln His Gly Ile Arg Leu Pro Leu Arg Ser Gly Leu Gly Gly Ala  
1 5 10 15

Pro Leu Gly Leu Glu Leu Asn Leu Glu Thr Asp Glu Glu Pro Glu Glu  
Page 27

Pro Gly Arg Arg Gly Ser Phe Val Glu Met Val Asp Asn Leu Arg Gly  
35 40 45

Lys Ser Gly Gln Gly Tyr Tyr Val Glu Met Thr Val Gly Ser Pro Pro  
50 55 60

Gln Thr Leu Asn Ile Leu Val Asp Thr Gly Ser Ser Asn Phe Ala Val  
65 70 75 80

Gly Ala Ala Pro His Pro Phe Leu His Arg Tyr Tyr Gln Arg Gln Leu  
85 90 95

Ser Ser Thr Tyr Arg Asp Leu Arg Lys Gly Val Tyr Val Pro Tyr Thr  
100 105 110

Gln Gly Lys Trp Glu Gly Glu Leu Gly Thr Asp Leu Val Ser Ile Pro  
115 120 125

His Gly Pro Asn Val Thr Val Arg Ala Asn Ile Ala Ala Ile Thr Glu  
130 135 140

Ser Asp Lys Phe Phe Ile Asn Gly Ser Asn Trp Glu Gly Ile Leu Gly  
145 150 155 160

Leu Ala Tyr Ala Glu Ile Ala Arg Pro Asp Asp Ser Leu Glu Pro Phe  
165 170 175

Phe Asp Ser Leu Val Lys Gln Thr His Val Pro Asn Leu Phe Ser Leu  
180 185 190

Gln Leu Cys Gly Ala Gly Phe Pro Leu Asn Gln Ser Glu Val Leu Ala  
195 200 205

Ser Val Gly Gly Ser Met Ile Ile Gly Gly Ile Asp His Ser Leu Tyr  
210 215 220

Thr Gly Ser Leu Trp Tyr Thr Pro Ile Arg Arg Glu Trp Tyr Tyr Glu  
225 230 235 240

Val Ile Ile Val Arg Val Glu Ile Asn Gly Gln Asp Leu Lys Met Asp  
245 250 255

Cys Lys Glu Tyr Asn Tyr Asp Lys Ser Ile Val Asp Ser Gly Thr Thr  
260 265 270

Asn Leu Arg Leu Pro Lys Lys Val Phe Glu Ala Ala Val Lys Ser Ile  
275 280 285

Lys Ala Ala Ser Ser Thr Glu Lys Phe Pro Asp Gly Phe Trp Leu Gly  
290 295 300

Glu Gln Leu Val Cys Trp Gln Ala Gly Thr Thr Pro Trp Asn Ile Phe  
305 310 315 320

Pro Val Ile Ser Leu Tyr Leu Met Gly Glu Val Thr Asn Gln Ser Phe  
325 330 335

Arg Ile Thr Ile Leu Pro Gln Gln Tyr Leu Arg Pro Val Glu Asp Val  
340 345 350

Ala Thr Ser Gln Asp Asp Cys Tyr Lys Phe Ala Ile Ser Gln Ser Ser  
355 360 365

Thr Gly Thr Val Met Gly Ala Val Ile Met Glu Gly Phe Tyr Val Val  
370 375 380

Phe Asp Arg Ala Arg Lys Arg Ile Gly Phe Ala Val Ser Ala Cys His  
385 390 395 400

Val His Asp Glu Phe Arg Thr Ala Ala Val Glu Gly Pro Phe Val Thr  
405 410 415

Leu Asp Met Glu Asp Cys Gly Tyr Asn Ile Pro Gln Thr Asp Glu Ser  
420 425 430

Thr

<210> 82  
<211> 42  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide to introduce ELNL site into soluble human  
proBACE1

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42

<210> 83  
<211> 27  
<212> DNA  
<213> Artificial

<220>

<223> oligonucleotide to introduce EINL site into soluble human  
proBACE1

<400> 83  
ggctctccagg ttgatttcca gacccag

27

<210> 84  
<211> 433  
<212> PRT  
<213> Artificial

<220>  
<223> soluble human proBACE1 containing an engineered EINL site  
starting at position 21

<400> 84

Thr Gln His Gly Ile Arg Leu Pro Leu Arg Ser Gly Leu Gly Gly Ala  
1 5 10 15

Pro Leu Gly Leu Glu Ile Asn Leu Glu Thr Asp Glu Glu Pro Glu Glu  
20 25 30

Pro Gly Arg Arg Gly Ser Phe Val Glu Met Val Asp Asn Leu Arg Gly  
35 40 45

Lys Ser Gly Gln Gly Tyr Tyr Val Glu Met Thr Val Gly Ser Pro Pro  
50 55 60

Gln Thr Leu Asn Ile Leu Val Asp Thr Gly Ser Ser Asn Phe Ala Val  
65 70 75 80

Gly Ala Ala Pro His Pro Phe Leu His Arg Tyr Tyr Gln Arg Gln Leu  
85 90 95

Ser Ser Thr Tyr Arg Asp Leu Arg Lys Gly Val Tyr Val Pro Tyr Thr  
100 105 110

Gln Gly Lys Trp Glu Gly Glu Leu Gly Thr Asp Leu Val Ser Ile Pro  
115 120 125

His Gly Pro Asn Val Thr Val Arg Ala Asn Ile Ala Ala Ile Thr Glu  
130 135 140

Ser Asp Lys Phe Phe Ile Asn Gly Ser Asn Trp Glu Gly Ile Leu Gly  
145 150 155 160

Leu Ala Tyr Ala Glu Ile Ala Arg Pro Asp Asp Ser Leu Glu Pro Phe  
165 170 175

Phe Asp Ser Leu Val Lys Gln Thr His Val Pro Asn Leu Phe Ser Leu  
Page 30

180

185

190

Gln Leu Cys Gly Ala Gly Phe Pro Leu Asn Gln Ser Glu Val Leu Ala  
 195 200 205

Ser Val Gly Gly Ser Met Ile Ile Gly Gly Ile Asp His Ser Leu Tyr  
 210 215 220

Thr Gly Ser Leu Trp Tyr Thr Pro Ile Arg Arg Glu Trp Tyr Tyr Glu  
 225 230 235 240

Val Ile Ile Val Arg Val Glu Ile Asn Gly Gln Asp Leu Lys Met Asp  
 245 250 255

Cys Lys Glu Tyr Asn Tyr Asp Lys Ser Ile Val Asp Ser Gly Thr Thr  
 260 265 270

Asn Leu Arg Leu Pro Lys Lys Val Phe Glu Ala Ala Val Lys Ser Ile  
 275 280 285

Lys Ala Ala Ser Ser Thr Glu Lys Phe Pro Asp Gly Phe Trp Leu Gly  
 290 295 300

Glu Gln Leu Val Cys Trp Gln Ala Gly Thr Thr Pro Trp Asn Ile Phe  
 305 310 315 320

Pro Val Ile Ser Leu Tyr Leu Met Gly Glu Val Thr Asn Gln Ser Phe  
 325 330 335

Arg Ile Thr Ile Leu Pro Gln Gln Tyr Leu Arg Pro Val Glu Asp Val  
 340 345 350

Ala Thr Ser Gln Asp Asp Cys Tyr Lys Phe Ala Ile Ser Gln Ser Ser  
 355 360 365

Thr Gly Thr Val Met Gly Ala Val Ile Met Glu Gly Phe Tyr Val Val  
 370 375 380

Phe Asp Arg Ala Arg Lys Arg Ile Gly Phe Ala Val Ser Ala Cys His  
 385 390 395 400

Val His Asp Glu Phe Arg Thr Ala Ala Val Glu Gly Pro Phe Val Thr  
 405 410 415

Leu Asp Met Glu Asp Cys Gly Tyr Asn Ile Pro Gln Thr Asp Glu Ser  
 420 425 430

Thr

<210> 85  
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<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide for L91C mutatio of human BACE1

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27

<210> 86  
<211> 27  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide for D93C mutation of human BACE1

<400> 86  
actgctgcct gtacacacca ggatggt

27

<210> 87  
<211> 27  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide for T133C mutation of human BACE1

<400> 87  
ttcccacttg ccacaggtgt agggcac

27

<210> 88  
<211> 27  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide for Q134C mutation of human BACE1

<400> 88  
ttcccacttg ccacaggtgt agggcac

27

<210> 89  
<211> 27  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide for K168C mutation of human BACE1

<400> 89  
gttgatgaag aaacagtctg attcagt

27



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<210> 90  
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 <212> DNA  
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 <223> oligonucleotide for F169C mutation of human BACE1  
  
 <400> 90  
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 <210> 91  
 <211> 27  
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 <220>  
 <223> oligonucleotide for I171C mutation of human BACE1  
  
 <400> 91  
 gttggagccg ttacagaaga acttgtc 27  
  
 <210> 92  
 <211> 27  
 <212> DNA  
 <213> Artificial  
  
 <220>  
 <223> oligonucleotide for W176C mutation of human BACE1  
  
 <400> 92  
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 <210> 93  
 <211> 27  
 <212> DNA  
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 <220>  
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 <400> 93  
 ggccagcccc agacagcctt cccagtt 27  
  
 <210> 94  
 <211> 27  
 <212> DNA  
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 <400> 94  
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 <210> 95  
 <211> 27

<212> DNA  
 <213> Artificial

<220>  
 <223> oligonucleotide for R189C mutation of human BACE1

<400> 95  
 ggagtcgtca ggacaggcaa tctcagc 27

<210> 96  
 <211> 27  
 <212> DNA  
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<220>  
 <223> oligonucleotide for Y259C mutation of human BACE1

<400> 96  
 gatcacctca taacaccact cccgccg 27

<210> 97  
 <211> 27  
 <212> DNA  
 <213> Artificial

<220>  
 <223> oligonucleotide for K285C mutation of human BACE1

<400> 97  
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<210> 98  
 <211> 27  
 <212> DNA  
 <213> Artificial

<220>  
 <223> oligonucleotide for I287C mutation of human BACE1

<400> 98  
 gccactgtcc acacagctct tgtcata 27

<210> 99  
 <211> 27  
 <212> DNA  
 <213> Artificial

<220>  
 <223> oligonucleotide for D289C mutation of human BACE1

<400> 99  
 ggtggtgcca ctacacacaa tgctctt 27

<210> 100  
 <211> 27  
 <212> DNA  
 <213> Artificial

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<220>  
 <223> oligonucleotide for T292C mutation of human BACE1  
 <400> 100  
 acgaaggttg gtacagccac tgtccac 27

<210> 101  
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<220>  
 <223> oligonucleotide for N294C mutation of human BACE1  
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<210> 102  
 <211> 27  
 <212> DNA  
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<220>  
 <223> oligonucleotide for R296C mutation of human BACE1  
 <400> 102  
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<210> 103  
 <211> 27  
 <212> DNA  
 <213> Artificial

<220>  
 <223> oligonucleotide for G325C mutation of human BACE1  
 <400> 103  
 caccagctgc tccactagcc agaaacc 27

<210> 104  
 <211> 27  
 <212> DNA  
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<220>  
 <223> oligonucleotide for R368C mutation of human BACE1  
 <400> 104  
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<210> 105  
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 <213> Artificial

<220>  
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<400> 105  
tgagatggca aaacagtaac agtcgtc 27

<210> 106  
<211> 27  
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<220>  
<223> oligonucleotide for S386C mutation of human BACE1

<400> 106  
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<210> 107  
<211> 27  
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<213> Artificial

<220>  
<223> oligonucleotide for T390C mutation of human BACE1

<400> 107  
cataacagtg ccacaggatg actgtga 27

<210> 108  
<211> 27  
<212> DNA  
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<220>  
<223> oligonucleotide for V393C mutation of human BACE1

<400> 108  
cagctcccat acaagtgccg gtggatg 27

<210> 109  
<211> 27  
<212> DNA  
<213> Artificial

<220>  
<223> oligonucleotide for inactivating D90N mutation of human BACE1

<400> 109  
actgctgcct gtgttcacca ggatgtt 27

<210> 110  
<211> 27  
<212> DNA  
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<220>  
<223> oligonucleotide for inactivating D289N mutation of human BACE1

<400> 110  
ggtggtgcca ctgttcacaa tgctctt 27

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